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14-2

Insulate a Subfloor With Blown Insulation Above Unconditioned Space

Job Aid for Insulate the Floor Above an Unconditioned Subspace (Site-Built Single Family) Badge

Aligns With Standard Work Specifications 4.0301.2, 4.0301.3, 4.0301.4

BEFORE YOU BEGIN

Uninsulated floor cavities present opportunities to increase the thermal performance of floors above unconditioned spaces. Insulation can be blown if a rigid barrier or netting is attached to the bottom of the floor joists.

Verify all air sealing and prep work is complete before installing support material.

Attach rigid barrier to cover all floor cavities.

Seal seams between sheets of rigid material to prevent air movement and insulation leakage.

Cut an access hole into each cavity of the floor, large enough for fill tube.

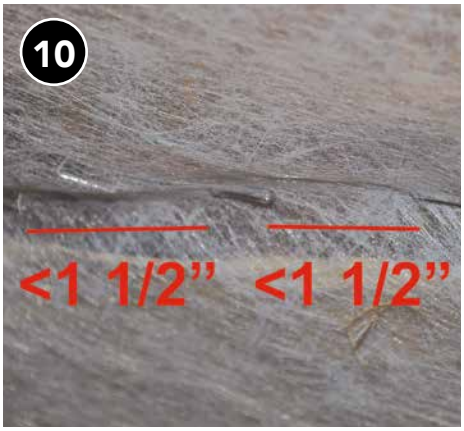
Use appropriate fill tube to insulate each cavity and ensure complete coverage.

Fill cavity completely to density required by work order.

Plug access hole either with original material cut out or appropriate replacement.

Seal around plug to keep it secure and air tight.

For work orders that require netting, secure a smooth layer of netting across the bottom of floor joists.



Keep staples close together.

Cover the entire cavity to ensure continuous insulation coverage and prevent insulation from blowing out the ends.

Cut access hole for fill tube.

Loose fill netting to required density.

Insulation with complete coverage that does not settle will improve the thermal performance of the floor assembly.

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Checklist

Insulate the floor above an unconditioned subspace (site-built single family)

DESIRED OUTCOME

Consistent thermal boundary between conditioned and unconditioned space to the prescribed R-value.[1]

General:

- ☐ Ensure that air sealing of the floor system was completed and worker verified before installing insulation.
- ☐ Install insulation to the prescribed R-value.
- ☐ Install insulation correctly for climate (e.g., vapor retarder layer toward the "warm" side).
- ☐ Secure insulation so that it will remain in contact with the subfloor.
- ☐ Ensure that insulation has no gaps, voids or compressions, misalignments, or potential for wind intrusion.
- ☐ Fill out applicable sections of house-wide insulation certificate with[2] insulation type, coverage area, installed thickness, settled thickness, R-value, and number of bags installed.

Batts:

- ☐ Secure batts with physical fasteners.

Blown-in:

- ☐ Where netting or rigid backing was installed to accommodate blown-in insulation, ensure that backing is:
  - ☐ Mechanically fastened to underside of floor assembly according to manufacturer specifications or better.
  - ☐ Providing 100% coverage of the floor assembly.
- ☐ Install insulation to the correct density.

1. Relevant Standards: 4.0301.2, 4.0301.3, 4.0301.4

2. Underlined details are required on all insulation certificates. Other items are required only when using blown-in insulation.

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For more information, visit: energy.gov/eere/wap

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